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10/577,774

07/28/2006

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EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/577,774 | Applicant(s) HORIKAWA ET AL. | |
| | Examiner Peter Agustin | Art Unit 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,6,8,11 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,7,9,10,12 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application is a national stage entry (371) of PCT/JP04/14234, filed September 29, 2004.
2. Claims 1-16 are currently pending.

Election/Restrictions

3. Applicant's election without traverse of Species (a), claims 1, 3, 5, 7, 9, 10, 12 and 14-16, in the reply filed on July 21, 2008 is acknowledged.
4. Claims 2, 4, 6, 8, 11 & 13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 21, 2008.
5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

8. Claims 1, 10, 12, 14 & 15 are objected to because of the following informalities:
- Claim 1, line 7: “the first recording speed” should be --a first recording speed--.
- Claim 1, lines 9-10: “a first recording speed” should be --the first recording speed--.
- Claim 10, line 8: “the first recording speed” should be --a first recording speed--.
- Claim 10, line 10: “a first recording speed” should be --the first recording speed--.
- Claim 12, line 3: “the an” should be --an--.
- Claim 12, line 13: “the first recording speed” should be --a first recording speed--.
- Claim 12, line 15: “a first recording speed” should be --the first recording speed--.
- Claim 14, line 7: “the first recording speed” should be --a first recording speed--.
- Claim 14, line 9: “a first recording speed” should be --the first recording speed--.
- Claim 15, line 3: “an usual” should be --a usual--.
- Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 3, 7, 9, 10, 12 & 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato (US 2002/0024903).

In regard to claim 1, Sato discloses an information recording apparatus (Figure 4) comprising: a recording device (5) for irradiating an information recording medium (1) with

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laser light and for recording information onto the information recording medium; an obtaining device (5, 6, 16 & 22) for obtaining at least one of (i) a special OPC strategy for defining a waveform of the laser light used to calculate, at a first recording speed (Figure 6, step S5: “8 X CLV”), an optimum laser power of the laser light (S5: “OPC”) for recording the information at a second recording speed (S9: “record by CAV”) different from the first recording speed, and (ii) a recording strategy for defining a waveform of the laser light used to record the information at the second recording speed (paragraph 0060: “optimum recording pulse width for prescribing the write strategy for the OPC”); a power calculating device for calculating the optimum laser power by using the special OPC strategy at the first recording speed (understood from OPC); and a controlling device (Figure 4, element 16) for controlling said recording device to record the information at the second recording speed, by using the calculated optimum laser power and the recording strategy (as shown in Figure 6).

In regard to claim 3, Sato discloses that said power calculating device calculates the optimum laser power by recording a test-writing pattern for calculating the optimum laser power (paragraph 0020: “test write”), and the special OPC strategy makes the waveform of the laser light for recording the test-writing pattern at the first recording speed, shorter than the waveform of the laser light for recording the information at the first recording speed (understood from paragraph 0064 and Figure 6).

In regard to claim 7, Sato discloses that the second recording speed is faster than the first recording speed (paragraph 0064: “this arbitrary linear velocity v is greater than the linear velocity v_{8x} ”).

In regard to claim 9, Sato discloses that an amplitude of the waveform defined by the special OPC strategy is the same as an amplitude of the waveform defined by the recording strategy (understood from paragraph 0064 and Figure 6).

Claims 10, 12 & 14 have similar limitations as claim 1; therefore, they are rejected on the same grounds.

In regard to claim 15, Sato discloses that a usual OPC strategy for defining a waveform of the laser light used to calculate an optimum laser power of the laser light for recording the information at the first recording speed is recorded in said control area (paragraph 0121: “PCA”, “predetermined linear velocity”).

In regard to claim 16, Sato discloses that a recording strategy for defining a waveform of the laser light used to record the information at the second recording speed is recorded in said control area (see paragraph 0121: “linear velocity v of the target recording zone”).

Allowable Subject Matter

11. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record alone or in combination fails to teach or suggest:

in claim 5, “wherein the special OPC strategy makes a percentage to shorten the waveform of the laser light for recording the test-writing pattern having a relatively short length, larger than a percentage to shorten the waveform of the laser light for recording

the test-writing pattern having a relatively long length, on the basis of a length of the test-writing pattern recorded on the information recording medium”.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hagiwara et al. (US 2002/0044507) disclose an optical disk device for recording data on a recordable or rewritable optical disk by setting a recording velocity and a recording power for each of zones on an optical disk.

Schreurs et al. (US 2003/0058765) disclose a method for selecting a write strategy from a set of write strategies, where the selected write strategy will be used to write information to an information carrier, comprising the steps of initializing parameters that establish a minimum acceptable write quality, setting a write speed to a first write speed, writing at least one test pattern to an information carrier while applying at least one write strategy from the set of write strategies, etc.

Takeshita (US 6,556,524) discloses an invention wherein a recording speed achieving a recording laser power level that can provide reproduced signal quality falling within a predetermined acceptable range is displayed as a recommendable recording speed so that a user can set the displayed speed as a recording speed for use in actual recording.

Chen (US 2003/0123352) discloses an invention wherein two different reference writing powers corresponding to two reference linear velocities at an inner and an outer radius of a compact disc are determined by an optimum power control procedure, and a reference table is

constructed according to the two reference writing powers and the two reference linear velocities.

Kurebayashi et al. (US 2004/0145993) disclose a method for writing information to an optical disk by irradiating laser light thereto, said optical disk storing: a first writing waveform parameter for a first write speed; a second writing waveform parameter for a second write speed higher than said first write speed; and a third writing waveform parameter for a third write speed higher than said second write speed; said method comprising the step of: writing information at said second write speed by use of a fourth writing waveform parameter obtained as a result of converting said second writing waveform parameter.

Takeda (US 7,035,184) discloses an invention wherein recorded test data are erased by radiating a laser beam of erasing power to the test area of the optical disk while a rotational speed of the optical disk is varied, and an erasure performance for erasing the test data is computed at each rotational speed, and the erasure performance is compared with the predetermined threshold value.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Agustin whose telephone number is (571) 272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Vincent Agustin/
Patent Examiner, Art Unit 2627